

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 11/5/2009 and 08/18/2009 were not considered since they were not listed as "Information Disclosure Statements" on the Image File Wrapper of the present application.
2. Applicant should note that the references in the stated related applications 12/604,068 and 10/566,093 have been considered by the examiner in the same manner as other documents in Office search files are considered by the examiner while conducting a search of the prior art in a proper field of search. See MPEP 609.05(b). Applicant is invited to point out any particular reference(s) that were cited in those applications that they believe may be of particular relevance to the instant claimed invention in response to this Office Action. If applicant intends to have particular references from those application considered in the current application and listed on the cover page of any issued patent, applicant is invited to submit a proper IDS, listing those particular references.

Drawings

3. The drawings are objected to because the subject matter of the application is illustrated by photographs in Figures 1-3 and 9. A drawing in place of the photograph is required (37 CFR 1.84(b)(1)). Should applicant contend that the figures are not photographs, the drawings would objected to as failing to comply with 37 CFR 1.84(m) because the shading provided by the applicant reduces the legibility of the invention.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 8-19, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillot (5,464,112) in view of Nozawa et al. (Nozawa US 5,423,442) and further in view of Harrold et al. (Harrold US 6,631,820).

Applicant has not challenged the Examiner's interpretation of the claim language "means" that is present throughout Claim 1, which was treated as NOT invoking 35 U.S.C. 112, sixth paragraph. See MPEP 2181.

In reference to Claim 1

Guillot discloses a device (Figure 1) capable of being used for leak-tight sealing of packaging containers for products sensitive to ambient pollutants, with controlled amplitude of the opening angle and mechanically assisted opening and closing, to be installed on the tubular casing of the access opening to said container, said device being made in one piece of thermoplastic polymer materials (col. 2, ll. 52-55, the determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art) and comprising:

- a leak-tight sealing means (comprising 12 and 24) of the access opening of the container,
- a means of assembly (24) of the sealing means capable for use with a tubular casing of the access opening,
- a connection means (28) between the sealing means and the assembly means,
- a first opening tamper resistance means (68), placed between the sealing means and the assembly means, wherein said resistance means comprises:
 - a) a male type stopper-cap-cap (12) as the sealing means of the opening in the tubular casing of the container, composed of an upper end wall (52) on which a first coaxial peripheral wall (58) is mounted capable of setting up a leak-tight contact with the inner surface of the tubular casing of the container access opening, and
 - b) as assembly means of the sealing means, an assembly ring (24) capable of being mounted on the tubular casing of the container access opening, the inner face of which is provided with a means of attachment (30 and 32) of the outer face of the casing,

Guillot discloses the claimed invention as discussed above with the exception of the following claimed limitations that are taught by Nozawa:

c) a connection means (Figure 2) between the assembly means and the sealing means, two distinct hinges (10) at a spacing from each other (see Figure 2),

wherein the two distinct hinges comprise film hinges (col. 2, ll. 52-54, and see Figure 5 where the hinges are shown as film hinges), each of which is formed of two parts forming brackets joined together by a polymer film acting as an axis of rotation allowing the opening/closing cycles of the sealing means (see Figure 4 where element 10 itself is the hinge and the portions connecting 10 to the cover forming the axis of rotation, see Figures 4-5, and the base are the brackets), one of the parts being integrated into the sealing means with the other part integrated into the assembly means (see the integrated portions in Figure 4, col. 2, ll. 52-54),

e) a mechanical assistance means (12) capable of opening and closing and controlling the amplitude of the opening angle of the sealing means, placed in the space located between the two hinges and simultaneously connected to the stopper-cap (see space between 10 in Figure 3) through a further film hinge (see 12b in Figure 5, where the hinge is a film hinge), and to the attachment ring fastening the device onto the casing by another film hinge (see 12a in Figure 5, where the hinge is a film hinge), the section through the said mechanical assistance means being in the form of a bracket (12 forms a bracket),
wherein, when viewed in a diametric section passing between the film hinges of the connecting means, the another film hinge of the mechanical

assistance and the part of the bracket joined to the assembly means are radially offset so as to be internal to the parts of the film hinges of the connecting means, which are integrated with the assembly means (see Figures 2-3 where hinge 12 is offset from hinges 10 and the hinge 12 is internal to the hinges 10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa so that the connection means (28 of Guillot) is modified to have three hinges in order to have an improved appearance and also to seal up the mouth of a cap body in the closed position (col. 1, ll. 49-51).

Guillot-Nozawa discloses the claimed invention as discussed above with the exception of the following claimed limitations that are taught by Harrold: as first opening tamper resistance means (97), a peripheral series of connecting micro-dots (97 that connects 40 and 92 together, col. 5, ll. 42-49) or a peripheral strip to be torn off, or a combination of these two means placed between the sealing means and the assembly means so that a lower peripheral surface of the sealing means is joined to an upper peripheral surface of the assembly means.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa so that the top cap (surface underneath 56 of Guillot) is attached to the surface (top surface of 24 in the right side of Figure 4) so that a further temper evident device was provided in order to provide a sealing means as well as provide a visual temper evident in order to keep materials contained within packaging containers safe, as taught by Harrold (col. 5, ll. 49-53).

In reference to Claim 8

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches that the stopper-cap is provided with a gripping visor (56).

In reference to Claim 9

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches that the stopper-cap is provided with a child opening safety system (68).

In reference to Claim 10

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 9 with and Guillot further teaches that the safety system is install adjacent to the visor (see Figure 1).

In reference to Claim 11

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 9 with and Guillot further teaches that the opening safety system is a flexible strip (comprising 70 and 72) surrounding the visor (see Figure 6) and forming an integral part of the assembly means (see 74 attached to 24 in Figure 6).

In reference to Claim 12

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches that the inner face of the stopper-cap outer wall and the outer face of the outer wall of the tubular casing of

the access opening of the container are provided with a click fit means (in as much as the applicant has claimed the click fit means, the outer wall 58 of Guillot provides a click/tight fit with a container when snapped in place as seen in Figure 4).

In reference to Claim 13

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches that the assembly means of the stopper-cap is an attachment ring capable of being mounted on the tubular casing of the access opening, provided with a click fit means (30 and 32) on its inner face capable of facing the outer face of the tubular casing, on which there is also a click fit means.

In reference to Claim 14

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches that the assembly means is capable of being force fitted on the tubular casing (see Figure 4).

In reference to Claim 15

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches that the assembly means is capable of being mounted by bonding on the tubular casing (see Figure 4, via 30 and 32).

In reference to Claim 16

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches the outer peripheral surface of the tubular casing (the tubular casing is not claimed) of the access opening to the container to be sealed comprises two projecting peripheral collars, separated from each other by creating a groove with an approximately rectangular shaped section, the thickness of the tubular casing inside the groove is not modified, and the attachment ring (24 of Guillot) is capable of being force fitted into the said groove.

In reference to Claim 17

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Guillot further teaches a peripheral groove that may have an approximately rectangular, hemispherical or semi-elliptical shaped section, is made recessed within the thickness of the wall of the tubular casing of the container (the container is not claimed), the thickness of the tubular casing inside the groove being modified, and being less than the thickness of the tubular casing and the attachment ring (24 of Guillot) is capable of being force fitted into the said groove.

In reference to Claim 18

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 16 with and Guillot further teaches the inner surface of the attachment ring (24) is provided with click fit means (30 and 32) which, when the said attachment ring capable of being force fitted into the groove of the container,

itself equipped with complementary click fit means, fits into the corresponding click fit means so as to block any rotation or translation of the stopper with respect to the container (the click fit means 30 and 32 are capable of performing the claimed functions).

In reference to Claim 19

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 18 with and Guillot further teaches that the click fit means on the inner surface of the attachment ring and on the inner surface of the groove in the container are splines or slots (30 and 32 are splines, a flexible piece of material).

In reference to Claim 22

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with the exception of the following claimed limitations: the amplitude of the opening angle controlled by the mechanical assistance means is not more than 160°.

Nozawa teaches that the amplitude of the opening angled controlled by the mechanical assistance means is of a varied degree in Figures 4-5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold so that the amplitude of the opening is not more than 160° since it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

In reference to Claim 23

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with the exception of the following claimed limitations: the angular deformation of the mechanical assistance means in the form of a bracket between a closed position and an open position is between 0° and not more than 30°.

Nozawa teaches that the angular deformation of the mechanical assistance means in the form of a bracket between a closed position and an open position is of a varied degree in Figures 4-5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold so that the angular deformation of the mechanical assistance means in the form of a bracket between a closed position and an open position is between 0° and not more than 30° since it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

In reference to Claim 24

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 and Guillot further teaches that the device is made from thermoplastic polymer composition selected from the group consisting of polyethylenes (PE), **polypropylenes** (PP, col. 2, ll. 52-55), ethylene / propylene copolymers and blends of them, polyamides (PA), polystyrenes (PS), acrylonitrile-butadiene- styrene (ABS) copolymers, styrene-acrylonitrile (SAN) copolymers, polyvinyl chlorides (PVC), polycarbonates (PC), polymethyl

methacrylate (PMMA), and polyethylene terephthalates (PET) used alone or mixed.

In reference to Claim 25

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 24 with the exception of the following claimed limitations: at least one natural or synthetic thermoplastic elastomer is associated with the thermoplastic compositions, the elastomer used being selected from the group consisting of natural rubber or synthetic rubber type elastomers, and rubbers based on mono-olefins, diolefin rubbers, rubbers based on condensation products, thermoplastic rubbers, silicones, styrenic rubbers, styrene- butadiene-styrene (SBS) and styrene-isoprene-styrene (SIS).

However Guillot further teaches that thermoplastic materials maybe used to make the closure cap.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold so that a specific type of thermoplastic material is used in the construction since the selection of a known material based on its suitability for its intended purpose was an obvious extension of prior art, *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Note: Applicant has not challenged the stated OFFICIAL NOTICE above in the reply filed 07/27/2011, thus the limitation is treated as admitted prior art.

In reference to Claim 26

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 and Guillot further teaches that the device is made in a single part according to plastics methodologies (col. 2, ll. 52-55).

In reference to Claim 27

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 and Guillot further teaches an obvious method for leak-tight sealing and ambient air purification treatment of packaging containers for products sensitive to gaseous pollutants comprising of utilizing a device according to claim 1 (the modified Guillot-Nozawa-Harrold can perform the obvious use as claimed by the applicant).

Furthermore, it has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1951).

In reference to Claim 28

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 24 with the exception of the following claimed limitations: at least one natural or synthetic thermoplastic elastomer is associated with the thermoplastic compositions, the elastomer being at least one selected from the group composed consisting of isobutene / isoprene polymers, ethylene vinyl acetate (EVA), ethylene-propylene (EPR), ethylene-propylene-diene (EPDM),

ethylene-acrylic esters (EMA-EEA), fluorinated polymers, polybutadienes, styrene-butadiene (SBR) copolymers, polyester, polyurethane, thermoplastic rubbers, silicones, styrenic rubbers, styrene-butadiene-styrene (SBS) and styrene-isoprene-styrene (SIS).

However Guillot further teaches that thermoplastic materials maybe used to make the closure cap.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold so that a specific type of thermoplastic material is used in the construction since the selection of a known material based on its suitability for its intended purpose was an obvious extension of prior art, *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Note: Applicant has not challenged the stated OFFICIAL NOTICE above in the reply filed 07/27/2011, thus the limitation is treated as admitted prior art.

6. Claims 2-4, 6, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Guillot (5,464,112) in view of Nozawa et al. (Nozawa US 5,423,442) and in view of Harrold et al. (Harrold US 6,631,820) and further in view of Sacherer (US 4,834,234).

In reference to Claim 2

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with and Sacherer further teaches:

The cross-section of the first coaxial peripheral wall (7) of the sealing means capable of setting up the leak-tight contact with the inner surface of the tubular casing of the opening of the container includes a peripheral swelling (8) developing on an outer face thereof (see Figure 1 of Sacherer).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold so that a peripheral swelling is provided on an outer face of the peripheral wall of Guillot in order to achieve high pressing-on force to provide good tightness, as taught by Sacherer (col. 1, ll. 58-60).

In reference to Claim 29

Guillot-Nozawa-Harrold discloses the claimed invention as discussed above for claim 1 with the exception of the following claimed limitations that are taught by Sacherer: a means for packaging an ambient air treatment agent on its inner face (means comprising 5, 6, 10, and 11 of Sacherer), wherein a second wall (5) of the male type stopper-cap internal to the first wall (7), forming the packaging means for the ambient air treatment agents.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold and further in view of Sacherer so that a second wall and an ambient air treatment agent of Sacherer are added internal to the first wall of Guillot in order to absorb moisture that unavoidably gets in during open/closing operation of a container, as taught by Sacherer (col. 1, ll. 28-30).

In reference to Claim 3

Guillot-Nozawa-Harbold-Sacherer discloses the claimed invention as discussed above for claim 2 with and Sacherer further teaches:

That the outer peripheral swelling (8) of the first wall is capable of being deformed when in contact with the inner wall of the tubular casing of the opening to increase the contact surface area between these two walls and to reinforce the leak-tightness (col. 1, ll. 53-58).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harbold-Sacherer so that the peripheral swelling of the first wall is capable of being deformed for reasons provide in claim 2.

In reference to Claim 4

Guillot-Nozawa-Harbold-Sacherer discloses the claimed invention as discussed above for claim 29 with and Sacherer further teaches:

That the packing means of ambient air treatment agents, placed on the inner face of the stopper-cap cap is tubular (see element 5, cylindrically shaped wall, col. 3, ll. 26-28).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harbold-Sacherer so that the packing means is tubular, for reasons stated in claim 29.

In reference to Claim 6

Guillot-Nozawa-Harbold-Sacherer discloses the claimed invention as discussed above for claim 29 with and Sacherer further teaches: wherein the packaging means of ambient air treatment agents, contains treatment agents capable of eliminating gaseous pollutants, and particularly water vapour (col. 2, ll. 42-55), oxygen (O₂), ammonia (NH₃), alcohols, aldehydes, ketones, sulphur dioxide (SO₂), hydrogen sulphide (H₂S), mercaptans, alkenes particularly including ethylene, alkynes, carbon dioxide (CO₂), carbon monoxide (CO), nitrogen dioxide (NO₂), alkanes and particularly methane (CH₄), halogens and particularly fluorine, and/or (interpreted as or) bacteria present in the ambient air. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harbold-Sacherer so that a treatment agent is provided, in order to absorb moisture, as taught by Sacherer (col. 1, ll. 27-30).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guillot (5,464,112) in view of Nozawa et al. (Nozawa US 5,423,442) and in view of Harbold et al. (Harbold US 6,631,820) and Sacherer (US 4,834,234) and further in view of Taskis et al. (Taskis 5,894,949).

In reference to Claim 7

Guillot-Nozawa-Harbold-Sacherer discloses the claimed invention as discussed above for claim 6 with the exception of the following claimed limitations that are taught by Taskis: when the pollutant is water vapour, the

treatment agent is selected from the group consisting of silica gels and molecular sieves in powdery form or deposited on a powdery support (see col. 2, ll. 57-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Guillot-Nozawa-Harrold-Sacherer and further in view of Taskis so that either silica gels or molecular sieves are provided in a powdery form in order to absorb moisture (col. 2, ll. 57-61).

Response to Arguments

8. Applicant's arguments with respect to claims 1 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that the amended Claim 1 teaches a device that is molded in closed configuration. The Examiner respectfully disagrees since this feature is not explicitly recited in the claims. Furthermore, the determination of patentability in a product-by-process claim is based on the product itself, even though the claim may be limited and defined by the process. That is, the product in such a claim is unpatentable if it is the same as or obvious from the product of the prior art, even if the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966 (Fed. Cir. 1985). A product-by-process limitation adds no patentable distinction to the claim, and is unpatentable if the claimed product is the same as a product of the prior art.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KING M. CHU whose telephone number is (571)270-7428. The examiner can normally be reached on Monday - Friday 10AM - 6PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Pickett can be reached on (571) 272-4560. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Gregory Pickett/
Supervisory Patent Examiner, Art Unit 3788

/KING M CHU/
Examiner, Art Unit 3788